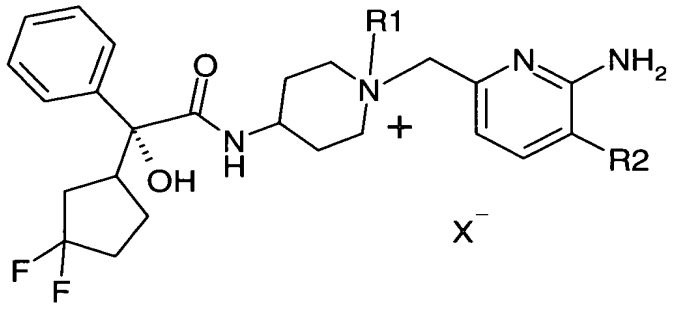
We claim:

1. A quaternary ammonium compound of formula I




and any stereoisomers thereof, wherein

$R_1$ is selected from $C_1$-$C_6$ alkyl, -$CH_2$-($C_1$-$C_4$ alkenyl), and –$CH_2$-($C_1$-$C_6$ alkynyl), each of which is optionally substituted with a group selected from phenyl, $C_1$-$C_4$ alkoxy, and hydroxyl;

$R_2$ is selected from H or OH; and

X represents an anion of a pharmaceutically acceptable acid.

2. The compound of claim 1, wherein X is selected from the group consisting of the anions of the following acids: tartaric, hydrochloric, hydrobromic, hydroiodic, sulfuric, phosphoric, nitric, citric, methanesulfonic, $CH_3$-$(CH_2)_n$-COOH where n is 0-4, HOOC-($CH_2$)n-COOH where n is 1-4, HOOC-CH=CH-COOH, and benzoic.

3. The compound of claim 1, wherein X is selected from the group consisting of iodide, bromide, and chloride.

4. The compound of claim 1, wherein X is iodide.

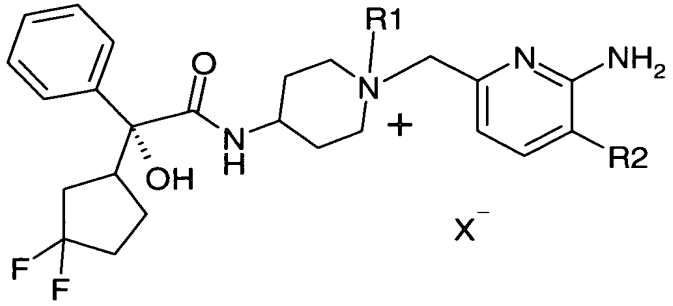
5. The compound of claim 1, wherein X is bromide.

6. The compound of claim 1, wherein X is chloride.

7. The compound of claim 1, wherein $R_1$ is methyl.

8. A compound (2R)-N-[1-(6-aminopyridin-2-ylmethyl)1-methylpiperdin-4-yl]-2-[(1R)-3,3,-difluorocyclopentyl]-2-hydroxy-2-phenylacetamide iodide.

9. A pharmaceutical composition comprising a pharmaceutical carrier and a therapeutically effective amount of a quaternary ammonium compound of formula I




and any stereoisomers thereof, wherein

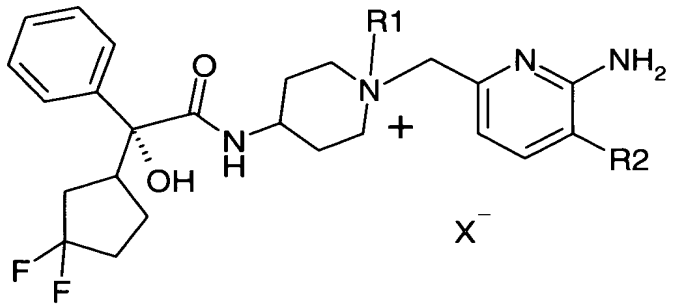
$R_1$ is selected from $C_1$-$C_6$ alkyl, -$CH_2$-($C_1$-$C_4$ alkenyl), and –$CH_2$-($C_1$-$C_6$ alkynyl), each of which is optionally substituted with a group selected from phenyl, $C_1$-$C_4$ alkoxy, and hydroxyl;

$R_2$ is selected from H or OH; and

X represents an anion of a pharmaceutically acceptable acid.

10. The method of treating a mammal for asthma, Chronic Obstructive Pulmonary Disease, allergic rhinitis, and infectious rhinitis, comprising:

administering a therapeutically effective amount of a quaternary ammonium compound of formula I, having the structure




and any stereoisomers thereof, wherein

$R_1$ is selected from $C_1$-$C_6$ alkyl, -$CH_2$-($C_1$-$C_4$ alkenyl), and –$CH_2$-($C_1$-$C_6$ alkynyl), each of which is optionally substituted with a group selected from phenyl,

$C_1$-$C_4$ alkoxy, and hydroxyl;

$R_2$ is selected from H or OH; and

X represents an anion of a pharmaceutically acceptable acid.